

## ABSTRACT

An encryption key transfer system is provided. The system may be operative to generate encrypted files on a portable storage medium which may be used to transfer encrypted keys between ATMs using a single operator. Such secret encrypted keys may include a terminal  
5 master key. The system may include a source ATM and a target ATM with a common software program and/or hardware installed in each ATM. The source ATM may use secret information associated with the common software program and/or hardware and other randomly generated information to securely encrypt the secret encryption keys. The source ATM may further store  
10 the encrypted secret encryption keys and the randomly generated information on a portable storage medium. The target ATM may be operative to decrypt the secret encrypted keys using the secret information associated with the common software program and/or hardware and the randomly generated information retrieved from the portable storage medium.